**IM3080 Design and Innovation Project (AY2021/22 Semester 1)**

**Individual Report**

Name: Toh Fu Hao

Group No: 3

Project Title: Jio

**Contributions to the Project** (1-2 page)

I helped to expedite the creation of our video game environment. I collaborated with Jia Le to draw the custom tile set that we used for the tilemaps. The tile sprites are pixel art drawn on Photoshop. I animated the water tiles on Unity using the package “2D Tilemap Extras”. I also worked on the creation of the normal map together with Jia Le as well.

After the custom tileset is done, I designed and created tilemaps for the landing and expeditions scenes on Unity. I collaborated with John to make sure that all the final designs of the tilemaps were integrated on Unity nicely.

Outside of the project, I also helped with creating the slides and presenting for some meetings with Prof Chua. I contributed to creating the storyboarding and recording of the video too.

**Reflection on Learning Outcome Attainment**

**Reflect on your experience during your project and the achievements you have relating to at least two of the points below:**

1. Engineering knowledge
2. Problem Analysis
3. Investigation
4. Design/development of Solutions
5. Modern Tool Usage
6. The Engineer and Society
7. Environment and Sustainability
8. Ethics
9. Individual and Team Work
10. Communication
11. Project Management and Finance
12. Lifelong Learning

Point 1: Communication

During the project, I had to make sure my idea for the game was clearly communicated to my teammates. There were times where my vision of the game was not properly conveyed to them. For example, at the start of the project, many of my teammates did not know the different platform games like top-down, isometric etc. This made it difficult for us to decide on what format our game environment should be like. To solve this, I researched on the several examples of the different type of platform games to present to them. As a result, my teammates were convinced of my vision of the game and entrusted me to provide more ideas. What I learnt from this is that, to communicate my ideas effectively, I need to fully understand the subject matter first so I can convey in a way that my teammates can understand. I should relate to my teammates before convincing them of my idea.

Point 2: Modern Tool Usage

In the previous semester, everyone learnt how to use Unity to create our own game. However, the genre of game that I created last semester was very different from what we had done for this project. I had to learn how to create a 2D platform game instead of a 3D first-person shooter. I am very pleased with how Unity facilitated our game making process. For example, the process of importing custom sprites was smooth and I am proud to say that we did not use any premade assets. This solidified our game’s identity, and vibrantly realized our picture of a cat fishing simulator. I was also impressed that Unity allowed us to integrate many features such as multiplayer networking and voice chat.

Additionally, John taught everyone how to use Github which made the process of collaboration online much simpler.